

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Larry Scheinberg et al. Art Unit : 3624
Serial No. : 09/667,894 Examiner : Thu-Thao Havan
Filed : September 22, 2000 Conf. No. : 1229
Title : CLEARING SYSTEM FOR AN ELECTRONIC-BASED MARKET

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APPEAL BRIEF ON BEHALF OF LARRY SCHEINBERG ET AL.

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Real Party In Interest

The real party in interest in the above application is The Clearing Corporation.

Related Appeals and Interferences

Appellants are not aware of any appeals or interferences related to the above-identified patent application.

Status of Claims

This is an appeal from the decision of the Primary Examiner in an office action dated November 24, 2006, rejecting claims 1-12, 14 and 16-24, all of the claims remaining in the above application. Claims 13, 15 were canceled. The claims have been twice rejected.

Claims 1-12, 14 and 16-24 are the claims on Appeal.

Appellants filed a Notice of Appeal with a Petition for Extension of Time on May 24, 2007.

Status of Amendments

All amendments have been entered.

Summary of Claimed Subject Matter

Claim 1

One aspect of Appellants' invention is set out in claim 1 as a method of clearing transactions on an electronic exchange. "*Referring to FIG. 1, an electronic market 10 or exchange that trade contracts to buy and sell goods is shown.*" [Specification page 3, lines 23-24].

Inventive features of claim 1 include performing a full settlement run after cessation of trading. "*The clearing system 30 includes a settlement engine 30b that performs a full settlement run 250 daily, after cessation of trading.*" [Specification page 21, lines 24-26].

Inventive features of claim 1 also include automatically marking-to-market all open positions. "*Exchange clearing and settlement systems 30 provide constant, real-time gross and net financial data. The exchange 10 system automatically marks-to-market all open positions.*" [Specification page 22, lines 3-5].

Inventive features of claim 1 also include determining which one of a cash based margin protocol or an asset based margin protocol is required by an open position. "*The exchange 10 uses different margin protocols 32a. For example, a conventional cash-based margin protocol can be used. The exchange 10 can also use an Asset-based protocol, as discussed below. ... The Asset-based Margin Protocol can reduce the costs of participating in futures markets without compromising risk management.*" [Specification page 21, lines 14-23].

Inventive features of claim 1 also include determining margin requirements for the open position according to the determined margin protocol. "*The clearing system 30 determines margin. With a cash margin protocol, at the end of every day, the system sends to subscribers 12, their depository or guaranteeing banks, as the case may be, and/or to their FCMs their debits and/or credits, and the resulting balances in, each subscriber's account. In the CMP, position information is disseminated and each subscriber or its guarantor will make or receive daily pays or collects. These transfers will take place through the exchange depository bank. In the AMP, position information will be disseminated, but no daily pays or collects will take place so long as sufficient assets are already identified. Subscribers 12 or their guarantor will be required to make payment or provide evidence of additional assets when a subscriber needs to meet new margin obligations.*" [Specification page 22, lines 5-19].

Claim 12

Claim 12 claims another aspect of the invention. Claim 12 is directed to a computer program product residing on a computer readable medium for clearing transactions on an electronic exchange. "*The system 11 will be described in more detail below. Suffice it here to say that the system 11 includes computer systems 22 and storage devices 24 that store trading accounts 18 and the processes 25 used to implement the electronic futures exchange 10. The*

system 11 is accessed by the participants using the Internet or other protocols, as will be described below.” [Specification page 4, lines 14-19].

Claim 12 also includes the feature of instructions to perform a full settlement run after cessation of trading;. This feature finds support as generally set out for claim 1.

Claim 12 also includes the feature of instructions to automatically mark-to-market all open positions. This feature finds support as generally set out for claim 1.

Claim 12 also includes the feature of instructions to determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position. This feature finds support as generally set out for claim 1.

Claim 12 also includes the feature of instructions to determine margin requirements for the open position according to the determined margin protocol. This feature finds support as generally set out for claim 1.

Claim 20

Another aspect of the invention is covered by claim 20. Claim 20 is directed to a system for clearing transactions on an electronic exchange. “*The system 11 will be described in more detail below. Suffice it here to say that the system 11 includes computer systems 22 and storage devices 24 that store trading accounts 18 and the processes 25 used to implement the electronic futures exchange 10. The system 11 is accessed by the participants using the Internet or other protocols, as will be described below.”* [Specification page 4, lines 14-19].

Claim 20 also includes the feature of a computer system that is fed information “*Exchange clearing and settlement systems 30 provide constant, real-time gross and net financial data.”* [Specification page 22, lines 3-4] regarding trades for traders on behalf of subscribers, “*The risk management system 32 includes a system-enforced position and trading limits process 220 that covers all traders 16 acting on behalf of a subscriber.”* [Specification page 22, lines 23-25] current prices for products traded on the exchange, information regarding margin available in a trading account “*The credit checking process 224 verifies credit, positions and available assets at order entry, upon significant market movements, and at the end of every trading day.”* [Specification page 20, lines 4-7] and margin requirements for a contract genus

"The exchange 10 uses different margin protocols 32a. For example, a conventional cash-based margin protocol can be used. The exchange 10 can also use an Asset-based protocol, as discussed below. The protocol used is determined by the contract genus." [Specification page 21, lines 14-18].

Claim 20 also includes the feature of a process that executes on the computer system including a computer program including instructions to perform a full settlement run after cessation of trading, instructions to automatically mark-to-market all open positions, instructions to determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position, and instructions to determine margin requirements for the open position according to the determined margin protocol. These features find support, as generally set out for claim 1.

Ground of Rejection to be Reviewed on Appeal

Claims 1-12, 14, and 16-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mosler et al. (US 6,304,858) in view of Selleck (US 2001/0049651) and Provisional Patent Application 60/200,248.

Argument

Obviousness

"It is well established that the burden is on the PTO to establish a *prima facie* showing of obviousness, *In re Fritsch*, 972 F.2d. 1260, 23 U.S.P.Q.2d 1780 (C.C.P.A., 1972)."

In *KSR International Co. v. Teleflex Inc.*, ___ U.S. ___, 2007 WL 1237837 (Apr. 30, 2007), the Supreme Court reversed a decision by the Court of Appeal's for the Federal Circuit decision that reversed a summary judgment of obviousness on the ground that the district court had not adequately identified a motivation to combine two prior art references. The invention was a combination of a prior art repositionable gas pedal, with prior art electronic (rather than mechanical cable) gas pedal position sensing. The Court first rejected the "rigid" teaching suggestion motivation (TSM) requirement applied by the Federal Circuit, since the Court's

obviousness decisions had all advocated a "flexible" and "functional" approach that cautioned against "granting a patent based on the combination of elements found in the prior art."

With respect to the genesis of the TSM requirement, the Court noted that although "As is clear from cases such as Adams¹, a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known."

In application of the TSM requirement, the Court cautioned that: "Helpful insights, however, need not become rigid and mandatory formulas; and when it is so applied, the TSM test is incompatible with our precedents." To the extent the Fed Cir has been applying a flexible rule recently, that flexible rule was not applied in this case, and the Fed Cir can figure out how to match its actions to this decision.

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

¹ United States v. Adams, 383 U. S. 39, 40 (1966)

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original, footnotes omitted).

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

Discussion

Before discussing the prior art rejection, it might be helpful to the Board for Appellants to review Appellants' contemplated margin operation for futures exchanges.

According to Appellants: "Subscribers 12 identify assets acceptable to the exchange 10 that can be used for margin to support positions."² The exchange "...determines the profit and loss of current trading, and recalculates 234 the margin requirement of the subscriber's portfolio. A comparison 236 is made of the asset value in the account versus the required margin, and, when a deficiency occurs 238, the exchange 10 requires additional assets of the subscribers 12."³ The exchange 10 uses different margin protocols 32a. For example, a conventional cash-based margin protocol can be used. The exchange 10 can also use an Asset-based protocol, as discussed below. The Asset-based Margin Protocol (AMP) replaces daily pays and collects of margin that occurs with the cash-based protocol, with asset verification at the subscriber and

² Appellant's specification page 4, lines 23-25.

³ Id. page 20, lines 26-29.

guarantor levels. The Asset-based Margin Protocol can reduce the costs of participating in futures markets without compromising risk management.”⁴

Claims 1-12, 14, and 16-24 are allowable over the combination of Mosler et al. and Selleck, since no combination of the references teaches the features of an asset based margin protocol.

Claims 1, 2, 4-12, 14, 17-20 and 22-24

For the purposes of this appeal only, claims 1, 2, 4-12, 14, 17-20 and 22-24 stand or fall together. Claim 12 is representative of this group of claims.

Appellants' claim 12 is neither described nor suggested by Mosler et al. and Selleck whether taken separately or in combination. Claim 12 is directed to a computer program product residing on a computer readable medium. Claim 12 includes instructions for causing a computer to: “... determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position; and determine margin requirements for the open position according to the determined margin protocol.” At least this feature and thus features that recite the asset based margin protocol are neither described nor suggested by any combination of Mosler and Selleck.

In the rejection, the examiner states in part:

Re claims 1, 12, and 20, Mosler teaches a method of clearing transactions on an electronic exchange comprising:
performing a settlement run after cessation of trading (fig. 5a (element \$54 and \$56));
automatically marking-to-market all open positions (col. 9, lines 19-38);
determining which one of a cash based margin protocol is required by an open position (col. 12, lines 1-29; col. 30, lines 43-52; col. 4, lines 46-61); and determining margin requirements for the open position according to the determined margin protocol (col. 21, lines 55-60; col. 30, lines 43-52).

However, Mosler does not explicitly teach an asset based margin protocol. On the other hand, Selleck discloses an asset based margin protocol when he discloses a method of trading asset-based instruments over the Internet (para. 0016, 0019-0026, 0028, and 0031-0033). Selleck discloses commodity exchanges for assets like pork-bellies and rice. He discloses a global trading system that enables anyone to buy, sell, and/or hedge any tradable asset or service via one online interface accessible through any Internet device using a Web browser. Global Trading (GT) enables

⁴ Id page, 21, lines 14-23.

every trader to trade on the price fluctuations of an underlying asset alone. GT enables every trader to lock in the price of any tradable asset (minus delivery and associated costs) by buying an eContract. Thus, it would have been obvious to one of ordinary skill in the art to enable an asset based margin protocol in an electronic exchange method to determine market opening position since an example of assets include cash or cash equivalents.⁵ (Emphasis in original)

Appellants contend that issue before the Board is whether any combination of Mosler with Selleck fairly teaches the claimed feature of determining what margin protocol to use and the feature of an asset based margin protocol. The examiner readily acknowledges that Mosler does not explicitly teach an asset based margin protocol, whereas Appellants have acknowledged that Mosler merely teaches the convention cash based protocol, which Appellants have identified as prior art.⁶

However, claim 12 requires a computer program product that deals with two different margin protocols – the cash based margin protocol and a novel type of margin that Appellants refer to as an “asset based margin protocol.” Claim 12 explicitly recites the feature of instructions “to determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position.”

The examiner however argues that a feature of determining which protocol is taught by Mosler. Specifically the examiner argues that Mosler teaches: “... determining which one of a cash based margin protocol is required by an open position (col. 12, lines 1-29; col. 30, lines 43-52; col. 4, lines 46-61) ...”

Appellants contend that Mosler does not have any teaching of “determining which one ... is required” The examiner argues for the existence in Mosler of a function of determining which one of two margin protocols to use to determine margin requirements. Appellants contend that no such teachings are suggested by Mosler, since Mosler only describes the conventional cash based margin protocol and thus inherently would not suggest any function of “determining which one ... is required”

This conclusion is compelled by examination of Mosler. Mosler discusses mark to market and settlement and mentions margin.⁷ No mention however is made of determining

⁵ Office Action pages 2 and 3

⁶ Appellant's specification page 21, lines 15-16.

⁷ Mosler, Col. 12, lines 1-29 see line 18.

which type of margin protocol to use. Mosler defines Margin and Margining.⁸ However, Mosler does not mention determining which type of margin protocol to use. While, Mosler discusses two types of settlements -- cash settled and auto roll contracts,⁹ no mention is made of margin. Thus, Mosler in addition to failing to suggest the Asset Based Margin Protocol feature of claim 12, also fails to suggest instructions to: "determine which ... margin protocol is required by an open position."

Claim 12 requires an explicit determination, which is inherently absent in Mosler, since Mosler only deals with a cash-based margin protocol. Accordingly, the instructions to determine margin requirements for the open position according to the determined margin protocol also distinguish claim 12 over Mosler, because these instructions to determine the margin requirements will differ depending on which protocol is required to evaluate an open position.

The examiner relies on Selleck to teach asset based margin protocol. Specifically, the examiner argues that: "Selleck discloses an asset based margin protocol when he discloses a method of trading asset-based instruments over the Internet (para. 0016, 0019-0020, 0028, and 0031-0033). Appellants disagree.

Appellants contend that Selleck discloses a commodity exchange for trading commodities (not assets as characterized by the examiner). Examples, these commodities include pork-bellies and rice. These commodities are not however margin but are instead the items that are traded in Selleck's described system.

Although the examiner does not specifically identify what in Selleck corresponds to instructions to determine which protocol to use (apparently relying solely on Mosler). However, the examiner appears to equate so called "eContracts" of Selleck with the asset based margin protocol recited in claim 12.

Appellants contend that the examiner fails to show that an "eContract" is margin. Rather, the examiner conflates two entirely different concepts. Appellants contend that rather than corresponding to margin, the "eContract" is the underlying futures contract traded in Selleck's

⁸ Mosler defines margin as: ""Margin" is the amount of money that an exchange requires as deposit in order for a dealer to maintain an account." Mosler, Col. 30, lines 43-52,

⁹ Mosler Col. 4, lines 46-61,

system. Selleck's "eContracts" correspond in some respects to "contract species" described by Appellants. Put another way, an "eContract" instrument is merely Selleck's Internet-based equivalent of a conventional futures contract. However, these instruments are not described as margin or usable as margin.

Thus, no combination of Mosler with Selleck describes or suggests the claimed features of instructions for causing a computer to: "... determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position and determine margin requirements for the open position according to the determined margin protocol, because neither reference describes two, different types of margin protocols and indeed the examiner has not properly identified the margin protocol used in Selleck.

Appellants recognize that Selleck does disclose a margin process. Specifically, Selleck discloses so called "eCash"¹⁰

Appellants contend that "eCash", as described by Selleck, in paragraph [0062], is merely the conventional cash based margin protocol. Specifically, Selleck describes that "eCash" is held by a bank and that the bank gives the depositor an account number. According to Selleck, the bank applies daily credits and debits based on trading positions and profits as the market moves, potentially each second.¹¹ This description merely describes how a cash-based margin protocol works in Mosler.

In any event, neither "eCash" nor "eContracts" are asset based margin protocol, as claimed. Appellants' claim 12 therefore, further distinguishes over any combination of these references, since the references when taken together neither describe nor suggest instructions ...to: "... determine which one of a cash based margin protocol or an asset based margin

¹⁰ [0062] eCash is legal tender--money in the bank or funds guaranteed by a bank to serve as an electronic financial credit either for making binding financial commitments through privately negotiated agreements (see eContract, dContract and oContract below) or to purchase products or services offered, at least on GT, if not online in general.

¹¹ A bank takes a deposit in physical cash, a liquid money market, a time deposit or a checking, savings or other account. The bank gives the depositor an account number and an electronic pass code. The basics of these accounts are that credits and debits are based on trading positions and profits as the market moves, potentially each second. One's eCash balance goes up or down based on those moves relative to positions taken. An eCash account must be set up before any trading is done, and the trader must read warning and disclaimer pages and agree to posted rules.

protocol is required by an open position; and determine margin requirements for the open position according to the determined margin protocol.”

No motivation to combine

The examiner’s motivation to combine the references also necessarily fails because not only does Selleck fail to suggest the feature that the examiner uses Selleck to teach, namely, “an asset based margin protocol,” as argued above, one of ordinary skill would not be motivated “to enable an asset based margin protocol in an electronic exchange method to determine market opening position since an example of assets include cash or cash equivalents,” as the examiner argues.

This motivation is inadequate for at least two reasons. First, the claimed feature is to “an asset-based margin protocol” not merely to assets, and the asset-based margin protocol is not “cash or cash equivalents.” This conclusion is clear from Appellant’s specification and also from Appellant’s claims. Rather, cash and cash equivalents are the providence of a conventional cash-based margin protocol.

Second, margin is not used to determine “market opening position.” Rather, margin is used in supporting “open positions” in such contracts, as part of risk management for an exchange.¹² One of skill in this art would understand that: “an open position in a futures contract” is a position that can have profits and losses credited to the account during trading on the exchange, i.e., a position that is not yet closed out or at contract termination. One of skilled in this art would not relate margin to “method to determine market opening position,”¹³ since in Appellants’ view that would be the providence of market supply and demand forces. Therefore, the examiner’s reasoning provides nothing to motivate the combination of the references.

In *KSR Int'l Co. v. Teleflex Inc.*, ____ U.S. ___, 2007 WL 1237837 (Apr. 30, 2007), supra, the Court rejected a “rigid” teaching suggestion motivation (TSM) test, since the Court’s obviousness decisions had all advocated a “flexible” and “functional” approach that cautioned against “granting a patent based on the combination of elements found in the prior art.”¹⁴

¹² See Appellant’s specification page 4, lines 23-25 and page 20, lines 8-18.

¹³ See Appellant’s specification page 23, line 23 to page 24, line 5.

¹⁴ *Id.* ____ U.S. at ____.

Appellants contend that even under this flexible approach adopted by the Court, claim 12 must be found allowable over this cited art, since the cited art does not have two different, margin protocols. While one can argue that a cash based margin protocol and eCash are different, Appellants contend that would be a semantic difference only. Functionally, they are the same. Therefore, unlike the situation posed by *KSR*, here the subject matter sought to be patented is not merely a combination of old elements found in the prior art, but rather a novel combination of an old element with a novel element.

Therefore, whether viewed under the so called "rigid" application of TSM or the "flexible" application of TSM, claim 12 is allowable over the combination of Mosler and Selleck, since no combination of Mosler with Selleck describes or suggests instructions ...to: "... determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position; and determine margin requirements for the open position according to the determined margin protocol."

Claims 2 and 14

Claim 2 is representative of this group of claims.

Claim 2 includes "determining margin requirements determines that the open position calls for a cash margin protocol." Claim 2 includes the additional features of "... sending to subscribers or subscriber depository or guaranteeing banks debits and/or credits and updating the resulting balances"

Claim 2 distinguishes over combination of Mosler and Selleck, since it requires that determining margin, determines that the open position calls for a cash based margin protocol. In the combination of Mosler and Selleck there is no determination of what protocol is required to settle open positions or to perform risk management, since each reference uses but one margin protocol, i.e., a cash-based margin protocol. Moreover, determining what margin protocol to use does not result from determining what is called for in the "open position." Rather, in both Mosler and Selleck the margin protocol to use is merely globally applied to transactions on the disclosed exchanges of both Mosler and Selleck.

Claims 3, 16, and 21

Claims 3, 16 and 21, distinguish over the combination of Mosler and Selleck, since no combination of these references describes or suggests that the instructions to determine include: “instructions to disseminate[ing] position information but no daily pays or collects will take place so long as sufficient assets are already identified.” Both Mosler and Selleck describe daily pays and collects from margin¹⁵ and thus both references use a cash-based margin protocol, although Mosler views margin as an implementation option.¹⁶ However, even if Mosler is construed to eliminate margin requirements, that is not make obvious claim 16, since while one could argue that no pays or collects will take place, as called for in claim 16, if margin were made obvious, the lack of pays or collects would not result from the requirement in the instructions of “so long as sufficient assets are already identified,” but rather from an option imposed by the exchange taught by Mosler.

Claim 7

Claim 7 further distinguishes over the combination of Mosler and Selleck, since no combination suggests, “...recording assets that are delivered to the exchange for satisfying margin.” As understood, in Mosler and Selleck assets be they cash or otherwise are not described as delivered to the exchange.

The examiner cites to col. 12, lines 1-19; col. 21, lines 55-60; col. 30, lines 43-52 of Mosler for these teaching.

Mosler at col. 12, lines 1-19, discusses maintaining margin requirements, not assets. Col. 21, lines 55-60 Mosler discusses, margining occurs daily, does not “recording assets that are delivered to the exchange” Mosler col. 30, lines 43-52 discusses margin as the amount of money required to be on deposit. However, that passage Mosler does not describe assets delivered to the exchange.

¹⁵ See Mosler col. 6, lines 42-45 “Most preferably, margining may occurs on a mark-to-market basis since that is the prevailing convention in futures markets, ...”

See Selleck “[0062] ... The basics of these accounts are that credits and debits are based on trading positions and profits as the market moves, potentially each second. One's eCash balance goes up or down based on those moves relative to positions taken”

¹⁶ “[0062]... although the invention may be implemented without margining, if desired.” Mosler

Claim 8

Claim 8 further distinguishes since no combination of Mosler and Selleck suggest that recording assets includes “determining an equivalent asset value to reflect a capital charge applied to special classes of assets.”¹⁷

The examiner contends that this is taught in the Abstract of Mosler. However, Mosler does not teach “determining an equivalent asset value to reflect a capital charge applied to special classes of assets” in the Abstract. Rather, Mosler merely discusses interest rate swap contracts, not margin and not to apply a charge to special classes of assets pertaining to margin requirements.

Claim 9

Claim 9 distinguishes since no combination of Mosler with Selleck teaches that “recording assets” also includes “maintaining an asset inventory for each trading account, and indicating whether assets in the trading account are limited to covering a single contract genus or a specific delivery commitment, or can be applied to multiple products.” No combination of Mosler with Selleck teaches “contract genus.” Therefore, in addition, no combination of Mosler with Selleck, teaches indicating whether the assets in the trading account are limited to covering a single contract genus, a specific delivery commitment or can be applied to multiple products.

Claim 10

Claim 10 distinguishes since no combination of Mosler with Selleck teaches determining an initial margin for each contract species held in a subscriber's trading account. No combination of Mosler with Selleck teaches a contact genus/species.

¹⁷ Appellants' specification page 21, lines 4-7. “Asset valuation also includes a capital charge process 236 that reflects both the cost of liquidating the asset, and the possible value changes such assets may incur before they can be sold.”

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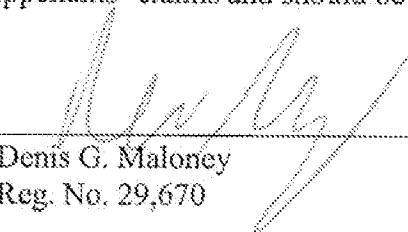
Attorney's Docket No.: 11847-002001

Conclusion

Appellants submit, therefore, that Claims 1-12, 14 and 16-24 are allowable over the cited art. Therefore, the Examiner erred in rejecting Appellants' claims and should be reversed.

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Appendix of Claims

1. A method of clearing transactions on an electronic exchange, comprising:
 - performing a full settlement run after cessation of trading;
 - automatically marking-to-market all open positions;
 - determining which one of a cash based margin protocol or an asset based margin protocol is required by an open position; and
 - determining margin requirements for the open position according to the determined margin protocol.
2. The method of claim 1 wherein determining margin requirements determines that the open position calls for a cash margin protocol, the method further comprising:
 - sending to subscribers or subscriber depository or guaranteeing banks debits and/or credits; and
 - updating the resulting balances in each subscriber's account.
3. The method of claim 1 wherein determining margin requirements determines that the open position calls for an asset based margin protocol, the method further comprising:
 - disseminating position information but no daily pays or collects will take place so long as sufficient assets are already identified.
4. The method of claim 1 wherein marking to market further comprises:
 - posting a position for a subscriber to a subscriber trading account as soon as any portion of an order is filled.
5. The method of claim 1 wherein marking to market further comprises:
 - determining whether the subscriber has a position at the other side of the market that can result in an offset of the position and the position at the other side of the market.

6. The method of claim 5 wherein marking to market further comprises:
liquidating the trade with any resulting credit or debit identified as a realized gain or loss in the subscriber's trading account.
7. The method of claim 1 wherein determining margin requirements further comprises:
recording assets that are delivered to the exchange for satisfying margin.
8. The method of claim 1 wherein recording assets further comprises:
determining an equivalent asset value to reflect a capital charge applied to special classes of assets.
9. The method of claim 1 wherein recording assets further comprises:
maintaining an asset inventory for each trading account, and indicating whether assets in the trading account are limited to covering a single contract genus or a specific delivery commitment, or can be applied to multiple products.
10. The method of claim 1 further comprising:
determining an initial margin for each contract species held in a subscriber's trading account.
11. The method of claim 1 further comprising:
determining a variation margin and applying the variation margin to the subscriber's trading account.
12. A computer program product residing on a computer readable medium for clearing transactions on an electronic exchange comprises instructions for causing a computer to:

perform a full settlement run after cessation of trading;
automatically mark-to-market all open positions;
determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position; and
determine margin requirements for the open position according to the determined margin protocol.

13. (Canceled)

14. The computer program product of claim 12 wherein instructions to determine margin requirement further comprise instructions to:

send messages that are debits and/or credits to subscribers or subscriber depository or guaranteeing banks; and
update a resulting balances in each subscriber's account.

15. (Canceled)

16. The computer program product of claim 12 wherein instructions to determine margin requirements further comprise instructions to:

disseminating position information but no daily pays or collects will take place so long as sufficient assets are already identified.

17. The computer program product of claim 12 wherein instructions to mark to market further comprise instructions to:

post a position for a subscriber to a subscriber trading account as soon as any portion of an order is filled.

18. The computer program product of claim 12 wherein instructions to mark to market further comprise instructions to:

determine whether the subscriber has a position at the other side of the market that can result in an offset of the position and the position at the other side of the market.

19. The computer program product of claim 12 wherein instructions to mark to market further comprise instructions to:

liquidate the trade with any resulting credit or debit identified as a realized gain or loss in the subscriber's trading account.

20. A system for clearing transactions on an electronic exchange, comprising:

a computer system that is fed information regarding trades for traders on behalf of subscribers, current prices for products traded on the exchange, information regarding margin available in a trading account and margin requirements for a contract genus;

a process that executes on the compute system, comprising:

a computer program product residing on a computer readable medium for clearing transactions on the electronic exchange comprising instructions for causing the computer to:

perform a full settlement run after cessation of trading;

automatically mark-to-market all open positions;

determine which one of a cash based margin protocol or an asset based margin protocol is required by an open position; and

determine margin requirements for the open position according to the determined margin protocol.

21. The apparatus of claim 20 wherein instructions to determine margin requirements further comprise instructions to:

disseminate position information but no daily pays or collects will take place so long as sufficient assets are already identified.

22. The apparatus of claim 20 wherein instructions to mark to market further comprise instructions to:

post a position for a subscriber to a subscriber trading account as soon as any portion of an order is filled.

23. The apparatus of claim 20 wherein instructions to mark to market further comprise instructions to:

determine whether the subscriber has a position at the other side of the market that can result in an offset of the position and the position at the other side of the market.

24. The apparatus of claim 20 wherein instructions to mark to market further comprise instructions to:

liquidate the trade with any resulting credit or debit identified as a realized gain or loss in the subscriber's trading account.

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Evidence Appendix

None

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Related Proceedings Appendix

None